

## APPENDIX A: FINAL REGULATORY FLEXIBILITY ANALYSIS

As required by the Regulatory Flexibility Act (RFA),<sup>75</sup> the Commission incorporated an Initial Regulatory Flexibility Analysis (**IRFA**) in the Notice of Proposed Rulemaking and Order ("*Notice*"), **ET** Docket No. 02-16.<sup>76</sup> The Commission sought written public comments on the proposals in the *Notice*, including the **IRFA**. The present Final Regulatory Flexibility Analysis ("FRFA") in this Report and Order conforms to the RFA, as amended by the Contract With America Advancement Act of 1996 ("CWAAA"), Pub. L. No. 104-121, 110 Stat. 847 (1996).

(A) Need for, and Objectives of this Report and Order.

By this action, the Commission reallocates 1640 kilohertz of spectrum from the fixed and mobile services to the broadcasting service. This action provides exclusive availability to broadcasting service in the HFBC bands. The Commission is making consequential changes to various service rules that will update the Rules for bands below 28000 kHz, so that they better comport with international regulations. Finally, this action will clarify the status of services in the AM Expanded Band (1605-1705 kHz).

(B) Summary of Significant Issues Raised by Public Comments in Response to the **IRFA**.

In the *Notice*, the Commission performed an **IRFA** and asked for comments that specifically addressed issues raised in the **IRFA**. No parties filed comments directly in response to the **IRFA**.

(C) Description and Estimate of the Number of Small Entities to Which Rules Will Apply.

The RFA directs agencies to provide a description of, and, where feasible, an estimate of the number of small entities that may be affected by the action taken.<sup>77</sup> The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."<sup>78</sup> In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.<sup>79</sup> A small business concern is one that: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) meets any additional criteria established by the Small Business Administration ("**SBA**").<sup>80</sup> A small organization is generally "any not-for-profit enterprise which is independently owned and operated and is not dominant in its field."<sup>81</sup> Nationwide, as of 1992, there were approximately 275,801 small organizations.<sup>82</sup> Finally,

<sup>75</sup> See 5 U.S.C. § 603. The RFA, see 5 U.S.C. § 601 *et. seq.*, has been amended by the Contract With America Advancement Act of 1996, Pub. L. No. 104-121, 110 Stat. 847 (1996) (CWAAA). Title II of the CWAAA is the small Business Regulatory Enforcement Fairness act of 1996 (SBREFA).

<sup>76</sup> See *Notice of Proposed Rule Making and Order*, 17 FCC Rcd 2789 (2002).

<sup>77</sup> 5 U.S.C. § 603(b)(3).

<sup>78</sup> *Id.* § 601(6).

<sup>79</sup> 5 U.S.C. § 601(3) (incorporating by reference the definition of "small business concern" in 15 U.S.C. § 632). Pursuant to the RFA, the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register." 5 U.S.C. § 601(3).

<sup>80</sup> Small Business Act, 15 U.S.C. § 632.

<sup>81</sup> 5 U.S.C. § 601(4).

<sup>82</sup> 1992 Economic Census, U.S. Bureau of the Census, Table 6 (special tabulation of data under contract to Office of Advocacy of the U.S. Small Business Administration).

“small governmental jurisdiction” generally means “governments of cities, counties, towns, townships, villages, school districts, or special districts, with a population of less than 50,000.”<sup>83</sup> As of 1992, there were approximately 85,006 such jurisdictions in the United States.<sup>84</sup> This number includes 38,978 counties, cities, and towns; of these, 37,566, or 96 percent, have populations of fewer than 50,000.<sup>85</sup> The United States Bureau of the Census (Census Bureau) estimates that this ratio is approximately accurate for all governmental entities. Thus, of the 85,006 governmental entities, we estimate that 81,600 (91 percent) are small entities.

Fixed Service. The SBA has developed a small business size standard for wireless firms within the two broad economic census categories of Paging<sup>86</sup> and Cellular and Other Wireless Telecommunications.<sup>87</sup> Under both SBA categories, a wireless business is small if it has 1,500 or fewer employees. For the census category of Paging, Census Bureau data for 1997 show that there were 1320 firms in this category, total, that operated for the entire year.<sup>88</sup> Of this total, 1303 firms had employment of 999 or fewer employees, and an additional 17 firms had employment of 1,000 employees or more.<sup>89</sup> Thus, under this category and associated small business size standard, the great majority of firms can be considered small. For the census category Cellular and Other Wireless Telecommunications firms, Census Bureau data for 1997 show that there were 977 firms in this category, total, that operated for the entire year.<sup>90</sup> Of this total, 965 firms had employment of 999 or fewer employees, and an additional 12 firms had employment of 1,000 employees or more.” Thus, under this second category and size standard, the great majority of firms can, again, be considered small.

Focusing more closely on the present context, we note that there are 162 fixed assignments authorized under Section 90.266 for long distance communications,<sup>92</sup> Alaska private-fixed assignments,” and 5 aeronautical fixed station assignments<sup>94</sup> that operate in the bands that are being reallocated pursuant this Report and Order. Using the above small business size standard, we believe that most of the Section 90.266 licensees are telephone, gas, and power companies that are not small businesses. Because we estimate that most of these fixed service licensees would not qualify as small entities under the SBA definition, we estimate that fewer than 184 small entities will be impacted by the reallocation.

<sup>83</sup> 5 U.S.C. 601(5).

<sup>84</sup> U.S. Dept. of Commerce, Bureau of the Census, “1992 Census of Governments.”

<sup>85</sup> *Id.*

<sup>86</sup> 13 CFR § 121.201, NAICS code 513321 (changed to 517211 in October 2002).

<sup>87</sup> 13 C.F.R. § 121.201, NAICS code 513322 (changed to 517212 in October 2002).

<sup>88</sup> U.S. Census Bureau, 1997 Economic Census, Subject Series: Information. “Employment Size of Firms Subject to Federal Income Tax: 1997,” Table 5, NAICS code 513321 (issued Oct. 2000).

<sup>89</sup> *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is “Firms with 1,000 employees or more.”

<sup>90</sup> U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, “Employment Size of Firms Subject to Federal Income Tax: 1997,” Table 5, NAICS code 513322 (issued Oct. 2000).

<sup>91</sup> *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is “Firms with 1,000 employees or more.”

<sup>92</sup> 47 C.F.R. § 90.266.

<sup>93</sup> 47 C.F.R. Part 80, Subpart O— Alaska Fixed Stations

<sup>94</sup> 47 C.F.R. §§ 87.275, 87.277, 87.279.

Maritime Service. Small businesses in the marine radio service use a very high frequency (VHF) marine radio and, as appropriate, an emergency position-indicating radio beacon (and/or radar). The Commission has not developed a special small business size standard for these businesses. We therefore utilize the SBA size standard for the category, "Cellular and Other Telecommunications," which encompasses companies that have 1,500 or fewer employees.<sup>95</sup> Census data for this category, including the small business breakout, are provided above in the "Fixed Service" discussion. Most applicants for recreational licenses are individuals. Approximately 581,000 ship station licensees (including individuals) operate domestically and are not subject to the radio carriage requirements of any statute or treaty. We also note that, during the period of December 3-14, **1998**, the Commission held an auction of 42 VHF Public Coast licenses in the 157.1875-157.4500 MHz (ship transmit) and 161.775-162.0125 MHz (coast transmit) bands. For purposes of the auction, the Commission defined a "small" business as an entity that, together with controlling interests and affiliates, has average gross revenues for the preceding three years not to exceed \$15 million dollars. In addition, a "very small" business is one that, together with controlling interests and affiliates, has average gross revenues for the preceding three years not to exceed \$3 million dollars.<sup>96</sup> There are approximately 10,672 licensees in the Marine Coast Service, and the Commission estimates that almost all of them qualify as "small" businesses under the above special small business size standards.

Focusing more closely on the present context, we note that there are ~~four~~ public coast stations and four private coast stations licensees that operate in the bands being reallocated, and we estimate that almost all of them qualify as small under the SBA size standard.

International Broadcast Stations. The SBA defines a television broadcasting station that has no more than \$12.0 million in annual receipts as a small business.<sup>97</sup> Television broadcasting stations consist of establishments primarily engaged in broadcasting visual programs by television to the public, except cable and other pay television services. Included in this industry are commercial, religious, educational, and other television stations. Also included are establishments primarily engaged in television broadcasting and which produce taped television program materials. There were 1,695 full-service television stations operating in the as of December 2001. According to Census Bureau data for 1997, there were 906 Television Broadcasting firms, total, that operated for the entire year. Of this total, 734 firms had annual receipts of \$9,999,999.00 or less and an additional 71 had receipts of \$10 million to \$24,999,999.00. Thus, under this standard, the majority of firms can be considered small.

The SBA defines a radio broadcasting station that has no more than \$6 million in annual receipts as a small business.<sup>98</sup> A radio broadcasting station is an establishment primarily engaged in broadcasting aural programs by radio to the public. Included in this industry are commercial, religious, educational, and other radio stations. Radio broadcasting stations which primarily are engaged in radio broadcasting and which produce radio program materials are similarly included. According to Census Bureau data for 1997, there were 4,476 Radio Stations (firms), total, that operated for the entire year. Of this total 4,265 had annual receipts of \$4,999,999.00 or less, and an additional 103 firms had receipts of \$5 million to \$9,999,999.00. Thus, under this standard, the great majority of firms can be considered small.

<sup>95</sup> 13 CFR § 121.201, NAICS code 513322 (changed to 517212 in October 2002).

<sup>96</sup> *Amendment of the Commission's Rules Concerning Maritime Communications*, PR Docket No. 92-257, Third Report and Order and Memorandum Opinion and Order, 13 FCC Rcd **19853** (1998).

<sup>97</sup> CFR § 121.201, NAICS code 513120 (changed to 515120 in October 2002).

<sup>98</sup> CFR § 121.201, NAICS code 513112 (changed to 515112 in October 2002).

Focusing more closely on the present context, the transmissions of international broadcast stations are intended to be received directly by the general public in foreign countries.<sup>99</sup> There are 24 international broadcast licensees, and we estimate that almost all of them qualify as small under the SBA size standards.

Private Land Mobile Radio Services. The Commission has not adopted a special small business size standard for private land mobile radio service licensees.<sup>100</sup> We will therefore utilize the size standards and census data small business breakouts as provided above in the “Fixed Service” discussion. This means that such entities are considered small if they employ no more than 1,500 persons. There are 4 Industrial/Business Pool licensees and 2 radiolocation licensees in the **AM** Expanded Band, and we believe that none of them qualify as small under the SBA size standards.

**(D) Description of Projected Reporting, Recordkeeping and Other Compliance Requirements for Small Entities.**

No new reporting or recordkeeping requirements are imposed on small entities. However, we are creating three compliance requirements that may have a significant economic burden on small entities. First, if fixed or coast station licensees determine that they can not operate in the WARC-92 HFBC bands without causing harmful interference to international broadcast stations, the licensees have to move to other fixed or mobile frequencies. Those fixed and coast station licensees that move to other assigned frequencies would have to pay a license modification fee if they do not request such frequencies during renewal.”” We note that 162 of the 205 assignments in these bands operate on a non-interference, unprotected basis internationally and that our rules do not change their status.”” In contrast, the status of the remaining 43 assignments will be affected by the allocation, that is, these primary and protected assignments would be downgraded to non-interference, unprotected status. These 43 assignments can be more specifically classified as 21 coast station, 17 Alaska private-fixed, and 5 aeronautical fixed assignments. We believe that all of the affected stations use equipment that can be tuned to other HF bands allocated to the fixed or mobile services and that there is sufficient allocated spectrum available for this purpose. Accordingly, we believe that any relocation costs would be *de minimus*. Secondly, we are “grandfathering” or allowing users of transmitters built on or before 1989 to be held only to the old standard of frequency control.”” Any international broadcast station after this date will have a stricter frequency control tolerance. This requirement may cause some of our licensees to have to modify their equipment.

The band 1605-1705 kHz was reallocated from the land mobile service to the broadcasting service in 1983. However, there are four Industrial/Business Pool licensees in the **AM** Expanded band. In addition, there are two radiolocation licensees operating in the AM Expanded band on a secondary basis. In this Report and Order, we are permitting these currently licensed stations to continue operation until the end of their current license term on a non-interference basis (“NIB”) to **AM** and travelers’ information stations (“TIS”), without an opportunity for renewal.<sup>104</sup>

<sup>99</sup> See 47 C.F.R. § 73.701

<sup>100</sup> The service is defined in Part 90 of the Commission’s Rules, 47 C.F.R. Part 90

<sup>101</sup> See Report and Order, ¶

<sup>102</sup> See 47 C.F.R. § 2.102(h) of the Commission’s Rules for the special provisions regarding the use of spectrum allocated to the fixed and land mobile services below 25 MHz by non-Federal Government stations.

<sup>103</sup> See ¶ 15, *supra*.

<sup>104</sup> See ¶¶ 17-19, *supra*.

(E) Steps Taken to Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered.

One significant alternative that we considered was whether or not to allow the few high frequency broadcast ("HFBC") stations, many of which are non-profit, a longer time to transition from outdated equipment. This transition relief will be necessary in instances in which equipment cannot maintain the stringent tolerance required by the amended rule. We have determined in this Report and Order to grandfather existing international broadcast stations at their current frequency tolerance.<sup>105</sup> This will assist such non-profits, including small entities, by providing relief from the rule as revised. Also, with regard to small entities and others operating in the AM Expanded Band, Commission staff will work with affected licensees to help them find suitable alternative channels if the licensee desires.<sup>106</sup> No fee will be charged to licensees of affected stations that apply for modification for alternative channels before the end of their license term.

(F) Report to Congress

The Commission will send a copy of this Final Regulatory Flexibility Analysis, along with this Report and Order, in a report to be sent to Congress pursuant to the Congressional Review Act, 5 U.S.C. § 801(a)(1)(A). In addition, the Commission will send a copy of this Report and Order, including this FRFA, to the Chief Counsel for Advocacy of the Small Business Administration. A copy of this Report and Order including FRFA (or summaries thereof), will also be published in the Federal Register. See 5 U.S.C. § 604(b).

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<sup>105</sup> See ¶ 15, *supra*.

<sup>106</sup> See ¶ 19, *supra*.

**APPENDIX B: Final Rules**

For the reasons discussed in the preamble, the Federal Communications Commission amends 47 CFR Parts 2, 73, 74, 80, 90, and 97 as follows:

**PART 2 – FREQUENCY ALLOCATIONS AND RADIO TREATY MATTERS; GENERAL RULES AND REGULATIONS**

1. The authority citation for Part 2 continues to read as follows:

AUTHORITY: 47 U.S.C. 154, 302a, 303, and 336, unless otherwise noted.

2. Section 2.106, the Table of Frequency Allocations, is amended as follows:

- a. Revise pages 1 through 21.

- b. In the list of International Footnotes, under II. Old Numbering Scheme, remove footnotes 459, 471, 472, 472A, 474, and 480.

- c. In the list of United States (US) Footnotes, revise footnotes US18, US25, US82, US104, US225, US231, US236, US238, US281, US282, US283, US298, US321, and US340; remove footnote US235; and add footnotes US364, US366, and US367.

The additions and revisions read as follows:

**§ 2.106 Table of Frequency Allocations.**

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International Table			United States Table		FCC Rule Part(s)
Below 9 (Not Allocated)			Below 9 (Not Allocated)		
5 53 5 54			5 53 5.54		
9-14 RADIONAVIGATION			9-14 RADIONAVIGATION US18		
			US294		
14-19.95 FIXED MARITIME MOBILE 5.57			14-19.95 FIXED MARITIME MOBILE 5.57	14-19.95 Fixed	
5.55 5.56			US294	US294	
19.95-20.05 STANDARD FREQUENCY AND TIME SIGNAL (20 kHz)			19.95-20.05 STANDARD FREQUENCY AND TIME SIGNAL (20 kHz)		
			US294		
20 05-70 FIXED MARITIME MOBILE 5 57			20 05-59 FIXED MARITIME MOBILE 5 57	20 05-59 FIXED	
			US294	US294	
			59-61 STANDARD FREQUENCY AND TIME SIGNAL (60 kHz)		
			US294		
			61-70 FIXED MARITIME MOBILE 5.57	61-70 FIXED	
			US294	US294	
70-72 RADIONAVIGATION 5.60	70-90 FIXED MARITIME MOBILE 5 57 MARITIME RADIONAVIGATION 5 60 Radiolocation	70-72 RADIONAVIGATION 5.60 Fixed Maritime mobile 5 57 5.59	70-90 FIXED MARITIME MOBILE 5 57 Radiolocation	70-90 FIXED Radiolocation	Private Land Mobile (90)
5.56					
72-84 FIXED MARITIME MOBILE 5.57 RADIONAVIGATION 5.6C 5.56		72-84 FIXED MARITIME MOBILE 5 57 RADIONAVIGATION 5 60			

84-86 RADIONAVIGATION 5 60		84-86 RADIONAVIGATION 5 60 Fixed Maritime mobile 5 57			
86-90 FIXED MARITIME MOBILE 5 57 RADIONAVIGATION 5.56		86-90 FIXED MARITIME MOBILE 5 57 RADIONAVIGATION 5 60	15294	US294	
90-110 RADIONAVIGATION 5.62 Fixed 5.64			0-110 RADIONAVIGATION 5.62 US18 IS104 US294		Aviation (87) Private Land Mobile (90)
110-112 FIXED MARITIME MOBILE RADIONAVIGATION 5.64	10-130 FIXED MARITIME MOBILE MARITIME RADIONAVIGATION 5 60 radiolocation	110-112 FIXED MARITIME MOBILE RADIONAVIGATION 5.60 5.64	10-130 FIXED MARITIME MOBILE radiolocation		Maritime (80) Private Land Mobile (90)
112-115 RADIONAVIGATION 5.60		112-117.6 RADIONAVIGATION 5.60 Fixed Maritime mobile			
115-117.6 RADIONAVIGATION 5.60 Fixed Maritime mobile 5.64 5.66		5.64 5.65			
117.6-126 FIXED MARITIME MOBILE RADIONAVIGATION 5.60 5.64		117.6-126 FIXED MARITIME MOBILE RADIONAVIGATION 5.60 5.64			
126-129 RADIONAVIGATION 5.60		126-129 RADIONAVIGATION 5.60 Fixed Maritime mobile 5.64 5.65			
See next page for 129-130 kHz	i.61 5.64	See next page for 129-130 kHz	i.64 US294		



International Table			United States Table		FCC Rule Part(s)
Region 1	Region 2	Region 3	Federal Government	Non-Federal Government	
129-130 FIXED MARITIME MOBILE RADIONAVIGATION 5.60 5.64	See previous page for 110-130 kHz	129-130 FIXED MARITIME MOBILE RADIONAVIGATION 5.60 5.64	See previous page for 110-130 kHz		See previous page for 110-130 kHz
130-148.5 FIXED MARITIME MOBILE 5.64 5.67	130-160 FIXED MARITIME MOBILE	130-160 FIXED MARITIME MOBILE RADIONAVIGATION	130-160 FIXED MARITIME MOBILE		Maritime (80)
148.5-255 BROADCASTING	5.64	5.64	5.64 US294		
	180-185 FIXED	180-185 FIXED Aeronautical radionavigation	FIXED MARITIME MOBILE US294	FIXED US294	
	190-200 AERONAUTICAL RADIONAVIGATION		190-200 AERONAUTICAL RADIONAVIGATION US18 US226 US294		Aviation (87)
5.68 5.69 5.70	200-275 AERONAUTICAL RADIONAVIGATION Aeronautical mobile	200-285 AERONAUTICAL RADIONAVIGATION Aeronautical mobile	200-275 AERONAUTICAL RADIONAVIGATION US18 Aeronautical mobile		
255-283.5 BROADCASTING AERONAUTICAL RADIONAVIGATION 5.70 5.71			US294		
283.5-315 AERONAUTICAL RADIONAVIGATION MARITIME RADIONAVIGATION (radiobeacons) 5.73	275-285 AERONAUTICAL RADIONAVIGATION Aeronautical mobile Maritime radionavigation (radiobeacons)		275-285 AERONAUTICAL RADIONAVIGATION Aeronautical mobile Maritime radionavigation (radiobeacons)		
5.72 5.74	285-315 AERONAUTICAL RADIONAVIGATION MARITIME RADIONAVIGATION (radiobeacons) 5.73		285-325 MARITIME RADIONAVIGATION (radiobeacons) 5.73 Aeronautical radionavigation (radiobeacons)		

315-325 AERONAUTICAL RADIONAVIGATION Maritime radionavigation (radiobeacons) 5.73 5.72 5.75	315-325 MARITIME RADIONAVIGATION (radiobeacons) 8.73 Aeronautical radionavigation	315-325 AERONAUTICAL RADIONAVIGATION MARITIME RADIONAVIGATION (radiobeacons) 5.73	US18 US29 US364	
325-405 AERONAUTICAL RADIONAVIGATION	325-335 AERONAUTICAL RADIONAVIGATION Aeronautical mobile Maritime radionavigation (radiobeacons)	325-405 AERONAUTICAL RADIONAVIGATION Aeronautical mobile	325-335 AERONAUTICAL RADIONAVIGATION (radiobeacons) Aeronautical mobile Maritime radionavigation (radiobeacons) US18 US294	Aviation (87)
5.72	335-405 AERONAUTICAL RADIONAVIGATION Aeronautical mobile		335-405 AERONAUTICAL RADIONAVIGATION (radiobeacons) US18 Aeronautical mobile US294	
405-415 RADIONAVIGATION 5.76 5.72	405-415 RADIONAVIGATION 5.76 Aeronautical mobile		405-415 RADIONAVIGATION 5.76 US18 Aeronautical mobile	Maritime (80) Aviation (87)
415-435  RADIONAVIGATION 5.72			415-435 MARITIME MOBILE 5.79	
435-495 MARITIME MOBILE 5.79 5.79A Aeronautical radionavigation 5.72 5.82			435-495 MARITIME MOBILE 5.79 5.79A Aeronautical radionavigation 472A US231 US294	Maritime (80)
	5.77 5.78 5.82		435-495 MARITIME MOBILE 5.79 5.79A 472A US231 US294	
495-505 MOBILE (distress and calling)			495-505 MOBILE (distress and calling) 472	Maritime (80) Aviation (87)

505-211			Hz (MF)		Page 5
International Table			United States Table		FCC Rule Part(s)
Region 1	Region 2	Region 3	Federal Government	Non-Federal Government	
505-526.5 MARITIME MOBILE 5.79 5.79A 5.84 AERONAUTICAL RADIONAVIGATION	505-510 MARITIME MOBILE 5.79  5 5.79A 5.84 AERONAUTICAL RADIONAVIGATION	505-526.5 MARITIME MOBILE 5.79 5.79A 5.84 AERONAUTICAL RADIONAVIGATION Aeronautical mobile Land mobile	505-510 MARITIME MOBILE 5.79		Maritime (80)
			10-525 MARITIME MOBILE (ships only) 5.79A 474 AERONAUTICAL RADIONAVIGATION (radiobeacons) IS18 S14 US225		Maritime (80) Aviation (87)
5.72 526.5-1606.5 BROADCASTING	525-535 BROADCASTING 5.86 AERONAUTICAL RADIONAVIGATION	526.5-535 BROADCASTING Mobile	25-535 AERONAUTICAL RADIONAVIGATION (radiobeacons) IS18 MOBILE US221  S239		Aviation (87) Private Land Mobile (90)
	535-1605 BROADCASTING	535-1606.5 BROADCASTING	35-1605  S321	535-1605 BROADCASTING JS321 NG128	Radio Broadcast (AM) (73) Auxiliary Broadcast (74) Alaska Fixed (80)
5.87 5.87A 1606.5-1625 FIXED MARITIME MOBILE 5.90 LAND MOBILE	1605-1625 BROADCASTING 5.89	1606.5-1800 FIXED MOBILE RADIOLOCATION RADIONAVIGATION	605-1615 MOBILE US221  S321	1605-1705 BROADCASTING 5.89	
5.92 1625-1635 RADIOLOCATION	5.90 1625-1705 FIXED MOBILE BROADCASTING 5.89 Radiolocation		615-1705		
5.93 1635-1800 FIXED MARITIME MOBILE 5.90 LAND MOBILE	5.90		IS238 US299 US321	US238 US299 US321 NG128	

	1705-1800 FIXED MOBILE		1705-1800 FIXED MOBILE RADIOLOCATION		Maritime (80) Private Land Mobile (90)
5.92 5.96	RADIONAVIGATION	5.91			
1800-1810 RADIOLOCATION	1800-1850 AMATEUR	1800-2000 AMATEUR FIXED MOBILE except aeronautical mobile RADIONAVIGATION Radiolocation	1800-1900	1800-1900 AMATEUR	Amateur (97)
5.93					
1810-1850 AMATEUR					
5.98 5.99 5.100 5.101					
1850-2000 FIXED MOBILE except aeronautical Mobile	1850-2000 AMATEUR FIXED MOBILE except aeronautical mobile RADIOLOCATION RADIONAVIGATION		1900-2000 RADIOLOCATION		Private Land Mobile (90) Amateur (97)
5.92 5.96 5.103	5.102	5.97	US290		
2000-2025 FIXED MOBILE except aeronautical mobile (R)	2000-2065 FIXED MOBILE		2000-2065 FIXED MOBILE	2000-2065 MARITIME MOBILE NG19	Maritime (80)
5.92 5.103					
2025-2045 FIXED MOBILE except aeronautical mobile (R) Meteorological aids 5.104					
5.92 5.103					
2045-2160 FIXED MARITIME MOBILE LAND MOBILE	2065-2107 MARITIME MOBILE 5.105		US340	US340	
	5.106				
5.92	See next page for 2107-2170 kHz				See next page

			kHz (MF/HF)		Page 7	
			United States Table		'CC Rule Part(s)	
Region 1	Region 2	Region 3	Federal Government	Non-Federal Government		
See previous page for 2045-2160 kHz	2107-2170 FIXED MOBILE		2107-2170 FIXED MOBILE	2107-2170 FIXED LAND MOBILE MARITIME MOBILE NG19	Maritime (80) Private Land Mobile (90)	
2160-2170 RADIOLOCATION 5 93 5 107			US340	US340		
			2170-2173.5 MARITIME MOBILE (telephony) US340	2170-2173.5 MARITIME MOBILE  US340	Maritime (80)	
2173.5-2190.5 MOBILE (distress and calling) 5.1085.1095.1105.111			217 190.1 MC (distress and calling) 5.108 5.109 5.110 5.111 US279 US340		Maritime (80) Aviation (87)	
2190.5-2194 MARITIME MOBILE			2190 5-2194 MARITIME MOBILE (telephony) US340	2190 5-2194 MARITIME MOBILE  US340	Maritime (80)	
2194-2300 FIXED MOBILE except aeronautical mobile (R) 5.92 5.103 5.112	2194-2300 FIXED MOBILE		2194-2495 FIXED MOBILE  US340	2194-2495 FIXED LAND MOBILE MARITIME MOBILE NG19  US340	Maritime (80) Aviation (87) Private Land Mobile (90)	
2300-2498 FIXED MOBILE except aeronautical mobile (R) BROADCASTING 5.113 5.103	2300-2495 FIXED MOBILE BROADCASTING 5.113					
2498-2501 STANDARD FREQUENCY AND TIME SIGNAL (2500 kHz)	2495-2501 STANDARD FREQUENCY AND TIME SIGNAL (2500 kHz)					
			US340			

2501-2502 STANDARD FREQUENCY AND TIME SIGNAL Space research		2501-2502 STANDARD FREQUENCY AND TIME SIGNAL JS340 G106	2501-2502 STANDARD FREQUENCY AND TIME SIGNAL US340	
2502-2625 FIXED MOBILE except aeronautical mobile (R) 5.92 5.103 5.114	502-2505 STANDARD FREQUENCY AND TIME SIGNAL  2505-2850 FIXED MOBILE	JS340		
2625-2650 MARITIME MOBILE MARITIME RADIONAVIGATION 5.92		2505-2850 FIXED LAND MOBILE MARITIME MOBILE	Maritime (80) Aviation (87) Private Land Mobile (90)	
2650-2850 FIXED MOBILE except aeronautical mobile (R) 5.92 5.103				
2850-3025 AERONAUTICAL MOBILE (R) 5.111 5.115		JS285 US340 US285 US340		Aviation (87)
3025-3155 AERONAUTICAL MOBILE (OR)		3025-3155 AERONAUTICAL MOBILE (OR) JS340		
3155-3200 FIXED MOBILE except aeronautical mobile (R) 5.116 5.117	3200-3230 FIXED MOBILE except aeronautical mobile (R) BROADCASTING 5.113	3155-3230 FIXED MOBILE except aeronautical mobile (R)  US340		Maritime (80) Private Land Mobile (90)

3230-50			<Hz (HF)		Page 9
International Table			United States Table		FCC Rule Part(s)
Region 1	Region 2	Region 3	Federal Government	Non-Federal Government	
3230-3400 FIXED MOBILE except aeronautical mobile BROADCASTING 5.113 5.116 5.118			230-3400 FIXED MOBILE except aeronautical mobile radiolocation S340		Maritime (80) Aviation (87) Private Land Mobile (90)
3400-3500 AERONAUTICAL MOBILE (R)			400-3500 AERONAUTICAL MOBILE (R) S283 US340		Aviation (87)
3500-3800 AMATEUR FIXED MOBILE except aeronautical mobile 5.92	3500-3750 AMATEUR 5.119 3750-4000 AMATEUR FIXED MOBILE except aeronautical mobile (R) 5.122 5.125	3500-3900 AMATEUR FIXED MOBILE	500-4000 JS340	1500-4000 AMATEUR JS340	Amateur (97)
3800-3900 FIXED AERONAUTICAL MOBILE (OR) LAND MOBILE					
3900-3950 AERONAUTICAL MOBILE (OR) 5.123		3900-3950 AERONAUTICAL MOBILE BROADCASTING			
3950-4000 FIXED BROADCASTING		3950-4000 FIXED BROADCASTING 5.126			
4000-4063 FIXED MARITIME MOBILE 5.127 5.126			4000-4063 FIXED MARITIME MOBILE US340		Maritime (80)
4063-4438 MARITIME MOBILE 5.79A 5.109 5.110 5.130 5.131 5.132 5.128 5.129			4063-4438 MARITIME MOBILE 5.79A 5.109 5.110 5.130 5.131 5.132 US82 JS296 US340		Maritime (80) Aviation (87)

4438-4650 FIXED MOBILE except aeronautical mobile (R)	4438-4650 FIXED MOBILE except aeronautical Mobile	4438-4650 FIXED MOBILE except aeronautical mobile (R) US340	Maritime (80) Aviation (87) Private Land Mobile (90)
4650-4700 AERONAUTICAL MOBILE (R)		4650-4700 AERONAUTICAL MOBILE (R) US282 US283 US340	Aviation (87)
4700-4750 AERONAUTICAL MOBILE (OR)		4700-4750 AERONAUTICAL MOBILE (OR) US340	
FIXED AERONAUTICAL MOBILE (OR) LAND MOBILE BROADCASTING 5.113	4750-4850 FIXED MOBILE except aeronautical mobile (R) BROADCASTING 5.113	4750-4850 FIXED MOBILE except aeronautical mobile (R) US340	Maritime (80)
4850-4995 FIXED LAND MOBILE BROADCASTING 5.113		4850-4995 FIXED MOBILE US340	Aviation (87)
4995-5003 STANDARD FREQUENCY AND TIME SIGNAL (5000 kHz)		4995-5003 STANDARD FREQUENCY AND TIME SIGNAL (5000 kHz) US340	
5003-5005 STANDARD FREQUENCY AND TIME SIGNAL Space research		5003-5005 STANDARD FREQUENCY AND TIME SIGNAL US340 G106	5003-5005 STANDARD FREQUENCY AND TIME SIGNAL US340
5005-5060 FIXED BROADCASTING 5.113		5005-5060 FIXED US340	Maritime (80) Aviation (87) Private Land Mobile (90)



5060-9040 kHz (HF)				Page 11
International Table			United States Table	FCC Rule Part(s)
Region 1	Region 2	Region 3	Federal Government	Non-Federal Government
5060-5250 FIXED Mobile except aeronautical mobile 5.133			5060-5450 FIXED Mobile except aeronautical mobile	Maritime (80) Aviation (87) Private Land Mobile (90)
5250-5450 FIXED MOBILE except aeronautical mobile			US212 US340	
5450-5480 FIXED AERONAUTICAL MOBILE (OR) LAND MOBILE	5450-5480 AERONAUTICAL MOBILE (R)	5450-5480 FIXED AERONAUTICAL MOBILE (OR) LAND MOBILE	5450-5680 AERONAUTICAL MOBILE (R)	Aviation (87)
5480-5680 AERONAUTICAL MOBILE (R)			5.111 5.115	
5680-5730 AERONAUTICAL MOBILE (OR)			5680-5730 AERONAUTICAL MOBILE (OR)	
5.111 5.115			5.111 5.115 US340	
5730-5900 FIXED LAND MOBILE	5730-5900 FIXED MOBILE except aeronautical mobile (R)	5730-5900 FIXED Mobile except aeronautical mobile (R)	5730-5900 FIXED MOBILE except aeronautical mobile (R)	Maritime (80) Aviation (87)
			US340	
5900-5950 BROADCASTING 5.134			5900-5950 BROADCASTING FIXED MOBILE except aeronautical mobile (R)	Radio Broadcast (HF) (73) Maritime (80) Aviation (87)
5.136			US340 US366	
5950-6200 BROADCASTING			5950-6200 BROADCASTING US340	Radio Broadcast (HF) (73)
6200-6525 MARITIME MOBILE 5.109 5.110 5.130 5.132 5.137			6200-6525 MARITIME MOBILE 5.109 5.110 5.130 5.132 US82 US296 US340	Maritime (80)
6525-6685 AERONAUTICAL MOBILE (R)			6525-6685 AERONAUTICAL MOBILE (R)	Aviation (87)
			US283 US340	

6685-6765 AERONAUTICAL MOBILE (OR)			6685-6765 AERONAUTICAL MOBILE (OR) US340		
6765-7000 FIXED Land mobile 5.139 5.138			6765-7000 FIXED Mobile 5.138 US340		SM Equipment (18)
7000-7100 AMATEUR AMATEUR-SATELLITE 5.140 5.141			7000-7100 US340	7000-7100 AMATEUR AMATEUR-SATELLITE US340	Amateur (97)
7100-7300 BROADCASTING	7100-7300 AMATEUR 5.142	7100-7300 BROADCASTING	7100-7300 US340	7100-7300 AMATEUR 5.142 US340	
7300-7350 BROADCASTING 5.134 5.143			7300-7350 BROADCASTING FIXED Mobile US340 US366		Radio Broadcast (HF) (73) Maritime (80) Private Land Mobile (90)
7350-8100 FIXED Land mobile 5.144			7350-8100 FIXED Mobile US340		Maritime (80) Aviation (87) Private Land Mobile (90)
8100-8195 FIXED MARITIME MOBILE			8100-8195 FIXED MARITIME MOBILE US340		Maritime (80)
8195-8815 MARITIME MOBILE 5.109 5.110 5.132 5.145 5.111			8195-8815 MARITIME MOBILE 5.109 5.110 5.132 5.145 US82 5.111 US296 US340		Maritime (80) Aviation (87)
8815-8965 AERONAUTICAL MOBILE (R)			8815-8965 AERONAUTICAL MOBILE (R) US340		Aviation (87)
8965-9040 AERONAUTICAL MOBILE (OR)			8965-9040 AERONAUTICAL MOBILE (OR) US340		

International Table			United States Table		FCC Rule Part(s)
Region 1	Region 2	Region 3	Federal Government	Non-Federal Government	
9040-9400 FIXED			9040-9400 FIXED US340		Maritime (80)
9400-9500 BROADCASTING 5.134			9400-9500 BROADCASTING FIXED US340 US366		Radio Broadcast (HF) (73) Maritime (80)
5 146 9500-9900 BROADCASTING 5.147			9500-9900 BROADCASTING 5 147 US340 US367		Radio Broadcast (HF) (73)
9900-9995 FIXED			9900-9995 FIXED US340		
9995-10003 STANDARD FREQUENCY AND TIME SIGNAL (10000 kHz)			9995-10003 STANDARD FREQUENCY AND TIME SIGNAL (10000kHz) 5.111 US340		
5.111 10003-10005 STANDARD FREQUENCY AND TIME SIGNAL Space research 5 111			10003-10005 STANDARD FREQUENCY AND TIME SIGNAL 5.111 US340 G106	10003-10005 STANDARD FREQUENCY AND TIME SIGNAL 5.111 US340	
10005-10100 AERONAUTICAL MOBILE (R) 5 111			10005-10100 AERONAUTICAL MOBILE (R) 5.111 US283 US340		Aviation (87)
10100-10150 FIXED Amateur			10100-10150 US247 US340	10100-10150 AMATEUR US247 US340	Amateur (97)
10150-11175 FIXED Mobile except aeronautical mobile (R)			10150-11175 FIXED Mobile except aeronautical mobile (R) US340		
11175-11275 AERONAUTICAL MOBILE (OR)			11175-11275 AERONAUTICAL MOBILE (OR) US340		

11275-11400 AERONAUTICAL MOBILE (R)	11275-11400 AERONAUTICAL MOBILE (R)	Aviation (87)
	US283 US340	
11400-11600 FIXED	11400-11600 FIXED	
	US340	
11600-11650 BROADCASTING 5.134	11600-11650 BROADCASTING FIXED	Radio Broadcast (HF) (73)
5.146	US340 US366	
11650-12050 BROADCASTING	11650-12050 BROADCASTING	
5.147	US340 US367	
12050-12100 BROADCASTING 5.134	12050-12100 BROADCASTING FIXED	
5.146	US340 US366	
12100-12230 FIXED	12100-12230 FIXED	
	US340	
12230-13200 MARITIME MOBILE 5.109 5.110 5.132 5.145	12230-13200 MARITIME MOBILE 5.109 5.110 5.132 5.145 US82	Maritime (80)
	US296 US340	
13200-13260 AERONAUTICAL MOBILE (OR)	13200-13260 AERONAUTICAL MOBILE (OR)	
	US340	
13260-13360 AERONAUTICAL MOBILE (R)	13260-13360 AERONAUTICAL MOBILE (R)	Aviation (87)
	US283 US340	
13360-13410 FIXED RADIO ASTRONOMY	13360-13410 RADIO ASTRONOMY	13360-13410 RADIO ASTRONOMY
5.149	5.149 G115	US342

13410.17900 kHz (HF)					Page 15
International Table			United States Table		FCC Rule Part(s)
Region 1	Region 2	Region 3	Federal Government	Non-Federal Government	
13410-13570 FIXED Mobile except aeronautical mobile (R)			13410-13570 FIXED Mobile except aeronautical mobile (R)	13410-13570 FIXED	SM Equipment (18)
5 150			5 150 US340	5 150 US340	
13570-13600 BROADCASTING 5 134			13570-13600 BROADCASTING FIXED Mobile except aeronautical mobile (R)	13570-13600 BROADCASTING FIXED	Radio Broadcast (HF) (73)
5 151			US340 US366	US340 US366	
13600-13800 BROADCASTING			13600-13800 BROADCASTING US340		
13800-13870 BROADCASTING 5 134			13800-13870 BROADCASTING FIXED Mobile except aeronautical mobile (R)	13800-13870 BROADCASTING FIXED	
5.151			US340 US366	US340 US366	
13870-14000 FIXED Mobile except aeronautical mobile (R)			13870-14000 FIXED Mobile except aeronautical mobile (R)	13870-14000 FIXED	
			US340	US340	
14000-14250 AMATEUR AMATEUR-SATELLITE			14000-14350	14000-14250 AMATEUR AMATEUR-SATELLITE	Amateur (97)
				US340	
14250-14350 AMATEUR				14250-14350 AMATEUR	
			US340	US340	
14350-14990 FIXED Mobile except aeronautical mobile (R)			14350-14990 FIXED Mobile except aeronautical mobile (R)	14350-14990 FIXED	
			US340	US340	

14990-15005 STANDARD FREQUENCY AND TIME SIGNAL (15000 kHz)	14990-15005 STANDARD FREQUENCY AND TIME SIGNAL (15000 kHz)	
5 111	5.111 US340	
15005-15010 STANDARD FREQUENCY AND TIME SIGNAL Space research	15005-15010 STANDARD FREQUENCY AND TIME SIGNAL US340 G106	15005-15010 STANDARD FREQUENCY AND TIME SIGNAL US340
15010-15100 AERONAUTICAL MOBILE (OR)	15010-15100 AERONAUTICAL MOBILE (OR) US340	
15100-15600 BROADCASTING	15100-15600 BROADCASTING US340	Radio Broadcast (HF) (73)
15600-15800 BROADCASTING 5 134	15600-15800 BROADCASTING FIXED	
15800-16360 FIXED	15800-16360 FIXED	
5 153	US340	
MARITIME MOBILE 5 109 5 110 5 132 5 145	MARITIME MOBILE 5 109 5 110 5 132 5 145 US82 US296 US340	Maritime (80)
17410-17480 FIXED	17410-17480 FIXED US340	
17480-17550 BROADCASTING 5 134	17480-17550 BROADCASTING FIXED US340 US366	Radio Broadcast (HF) Aviation (87)
5 146		
17550-17900 BROADCASTING	17550-17900 BROADCASTING US340	Radio Broadcast (HF) (73)

17900-22 35 kHz (HF)

Page 17

International Table			United States Table		FCC Rule Part(s)
Region 1	Region 2	Region 3	Federal Government	Non-Federal Government	
17900-17970 AERONAUTICAL MOBILE (R)			17900-17970 AERONAUTICAL MOBILE (R) JS283 US340		Aviation (87)
17970-18030 AERONAUTICAL MOBILE (OR)			17970-18030 AERONAUTICAL MOBILE (OR) JS340		
18030-18052 FIXED			18030-18068 FIXED		Maritime (80)
18052-18068 FIXED Space research			JS340		
18068-18168 AMATEUR AMATEUR-SATELLITE 5.154			18068-18168 JS340	18068-18168 AMATEUR AMATEUR-SATELLITE US340	Amateur (97)
18168-18780 FIXED Mobile except aeronautical mobile			18168-18780 FIXED Mobile JS340		Maritime (80)
18780-18900 MARITIME MOBILE			18780-18900 MARITIME MOBILE US82 US296 US340		
18900-19020 BROADCASTING 5 134 5 146			18900-19020 BROADCASTING FIXED US340 US366		Radio Broadcast (HF) (73)
19020-19680 FIXED			19020-19680 FIXED US340		
19680-19800 MARITIME MOBILE 5 132			19680-19800 MARITIME MOBILE 5.132 US340		Maritime (80)
19800-19990 FIXED			19800-19990 FIXED US340		

19990-19995 STANDARD FREQUENCY AND TIME SIGNAL Space research 5.111	19990-20010 STANDARD FREQUENCY AND TIME SIGNAL (20000 kHz)	19990-20010 STANDARD FREQUENCY AND TIME SIGNAL (20000 kHz)	
19995-20010 STANDARD FREQUENCY AND TIME SIGNAL (20000 kHz) 5 111	5 111 US340 G106	5 111 US340	
20010-21000 FIXED Mobile	20010-21000 FIXED Mobile US340	20010-21000 FIXED US340	
21000-21450 AMATEUR AMATEUR-SATELLITE	21000-21450 US340	21000-21450 AMATEUR AMATEUR-SATELLITE US340	Amateur (97)
21450-21850 BROADCASTING	21450-21850 BROADCASTING US340		Radio Broadcast (HF) (73)
21850-21870 FIXED 5.155A 5.155	21850-21924 FIXED US340		Aviation (87)
21870-21924 FIXED 5.155B			
21924-22000 AERONAUTICAL MOBILE (R)	21924-22000 AERONAUTICAL MOBILE (R) US340		
22000-22855 MARITIME MOBILE 5.132 5.156	22000-22855 MARITIME MOBILE 5.132 US82 US296 US340		Maritime (80)



International Table	United States Table		FCC Rule Part(s)
22855-23000 FIXED 5 156	22855-23000 FIXED US340		
23000-23200 FIXED Mobile except aeronautical mobile (R) 5 156	23000-23200 FIXED Mobile except aeronautical mobile (R) US340	23000-23200 FIXED US340	
23200-23350 FIXED 5 156A AERONAUTICAL MOBILE (OR)	23200-23350 AERONAUTICAL MOBILE (OR) US340		
23350-24000 FIXED MOBILE except aeronautical mobile 5 157	23350-24890 FIXED MOBILE except aeronautical mobile US340	23350-24890 FIXED US340	
24000-24890 FIXED LAND MOBILE			
24890-24990 AMATEUR AMATEUR-SATELLITE	24890-24990 US340	24890-24990 AMATEUR AMATEUR-SATELLITE US340	Amateur (97)
24990-25005 STANDARD FREQUENCY AND TIME SIGNAL 125000kHz)	24990-25005 STANDARD FREQUENCY AND TIME SIGNAL (25000 kHz) US340		
25005-25010 STANDARD FREQUENCY AND TIME SIGNAL Space research	25005-25010 STANDARD FREQUENCY AND TIME SIGNAL US340 G106	25005-25010 STANDARD FREQUENCY AND TIME SIGNAL US340	
25010-25070 FIXED MOBILE except aeronautical mobile	25010-25070 US340	25010 25070 LAND MOBILE US340 NG112	Private Land Mobile (90)

25070-25210 MARITIME MOBILE	25070-25210 MARITIME MOBILE US82  US281 US296 US340	25070-25210 MARITIME MOBILE US82 US281 US296 US340 NG112	Maritime (80) Private Land Mobile (90)
25210-25550 FIXED MOBILE except aeronautical mobile	25210-25330  US340	25210-25330 LAND MOBILE US340	Private Land Mobile (90)
	25330-25550 FIXED MOBILE except aeronautical mobile US340	25330-25550  US340	
25550-25670 RADIO ASTRONOMY 5.149	25550-25670 RADIO ASTRONOMY US74 US342		
25670-26100 BROADCASTING	25670-26100 BROADCASTING  US25 US340		Radio Broadcast (HF) (73) Remote Pickup (74D)
26100-26175 MARITIME MOBILE 5.132	26100-26175 MARITIME MOBILE 5.132  US25 US340		Remote Pickup (74D) Maritime (80)

25175-28000 kHz (HF)					
International Table			United States Table		FCC Rule Part(s)
Region 1	Region 2	Region 3	Federal Government	Non-Federal Government	
26175-27500 FIXED MOBILE except aeronautical mobile			26175-26480	26175-26480 LAND MOBILE	Remote Pickup (74D)
			US340	US340	
			26480-26950 FIXED MOBILE except aeronautical mobile	26480-26950	
			US10 US340	US10 US340	
			26950-27410	26950-26960 FIXED	ISM Equipment (18)
				5.150 US340	
				26960-27230 MOBILE except aeronautical mobile	ISM Equipment (18) Personal Radio (95)
				5.150 US340	
				27230-27410 FIXED MOBILE except aeronautical mobile	ISM Equipment (18) Private Land Mobile (90) Personal Radio (95)
			5.150 US340	5.150 US340	
5.150 27500-28000 METEOROLOGICAL AIDS FIXED MOBILE			27410-27540	27410-27540 FIXED LAND MOBILE	Private Land Mobile (90)
			US340	US340	
			27540-28000 FIXED MOBILE	27540-28000	
			US298 US340	US298 US340	

## UNITED STATES (US) FOOTNOTES

\* \* \* \* \*

US18 Navigation aids in the U.S. and its insular areas in the bands 9-14 kHz, 90-110 kHz, 190415 kHz, 510-535 kHz, and 2700-2900 MHz are normally operated by the U.S. Government. However, authorizations may be made by the FCC for non-U.S. Government operations in these bands subject to the conclusion of appropriate arrangements between the FCC and the Government agencies concerned and upon special showing of need for service which the U.S. Government is **not** yet prepared to render.

\* \* \* \* \*

US25 The use of frequencies 26110 kHz, 26130 kHz, 26151 kHz, and 26172 kHz may be authorized to **non-U.S.** Government remote pickup broadcast base and mobile stations on the condition that harmful interference is not caused to the reception of either international broadcast stations transmitting in the band 25850-26100 kHz or to coast stations transmitting in the band 26100-26175 kHz.

\* \* \* \* \*

US82 The assignable frequencies in the bands 4146-4152 kHz, 6224-6233 kHz, 8294-8300 kHz, 12353-12368 kHz, 16528-16549 kHz, 18825-18846 kHz, 22159-22180 kHz, and 25100-25121 kHz may be authorized on a shared non-priority basis to U.S. Government and non-U.S. Government ship and coast stations (SSB telephony, with peak envelope power not to exceed 1 kW).

\* \* \* \* \*

US104 The LORAN Radionavigation System has priority in the band 90-110 kHz in the United States and its insular areas. Radiolocation land stations making use of LORAN type equipment may be authorized to both U.S. Government and non-U.S. Government licensees on a secondary basis for offshore radiolocation activities only at specific locations and subject to such technical and operational conditions (e.g., power, emission, pulse rate and phase code, hours of operation), including on-the-air testing, as may be required on a case-by-case basis to ensure protection of the LORAN radionavigation system from harmful interference and to ensure mutual compatibility among radiolocation operators. Such authorizations to stations in the radiolocation service are further subject to showing of need for service which is not currently provided and which the U.S. Government is **not** yet prepared to render by way of the radionavigation service.

\* \* \* \* \*

US225 In addition to its present U.S. Government use, the band 510-525 kHz *is* available to U.S. Government and non-U.S. Government aeronautical radionavigation stations inland of the Territorial Base Line as coordinated with the military services. In addition, the frequency 510 kHz is available for non-U.S. Government ship-helicopter operations when beyond 100 nautical miles from shore and required for aeronautical radionavigation.

\* \* \* \* \*

US231 When an assignment cannot be obtained in the bands between 200 kHz and 525 kHz, which are allocated to aeronautical radionavigation, assignments may be made to aeronautical radiobeacons in the maritime mobile band 435-490 kHz, on a secondary basis, subject to the coordination and agreement ~~of~~ those agencies having assignments within the maritime mobile band which may be affected. Assignments to U.S. Government aeronautical radionavigation radiobeacons in the band 435-490 kHz shall not be a bar to any required changes to the maritime mobile radio service and shall be limited to non-voice emissions.

\* \* \* \* \*

US236 On the camer frequency 4035 kHz, Alaska-private fixed stations that were authorized as of [effective date of this Report and Order published in the Federal Register] may continue operations on a secondary basis to stations in the maritime mobile service.

\* \* \* \* \*

US238 On the condition that harmful interference is **not** caused to the reception of AM broadcast stations or to travelers' information stations, U.S. Government stations in the band 1615-1705 kHz may continue operations until February 25, 2004.

\* \* \* \* \*

US281 In the band 25070-25210 kHz, non-U.S. Government stations in the Industrial/Business Pool shall not cause harmful interference to, and must accept interference from, stations in the maritime mobile service operating in accordance with the International Table of Frequency Allocations.

US282 In the band 4650-4700 kHz, frequencies may be authorized for non-U.S. Government communication with helicopters in support of off-shore drilling operations on the condition that harmful interference will not be caused to services operating in accordance with the Table of Frequency Allocations.

US283 In the bands 2850-3025 kHz, 3400-3500 kHz, 4650-4700 kHz, 5450-5680 kHz, 6525-6685 kHz, 10005-10100 kHz, 11275-11400 kHz, 13260-13360 kHz, and 17900-17970 kHz, frequencies may be authorized for non-U.S. Government flight test purposes on the condition that harmful interference will **not** be caused to services operating in accordance with the Table of Frequency Allocations.

\* \* \* \* \*

US298 Channels 27555 kHz, 27615 kHz, 27635 kHz, 27655 kHz, 27765 kHz, and 27860 kHz are available for use by forest product licensees on a secondary basis to U.S. Government operations including experimental stations. Non-U.S. Government operations on these channels will not exceed 150 watts output power and are limited to the states of Washington, Oregon, Maine, North Carolina, South Carolina, Tennessee, Georgia, Florida, Alabama, Mississippi, Louisiana, and Texas (eastern portion).

\* \* \* \* \*

US321 The band 535-1705 kHz is also allocated to the non-U.S. Government mobile service on a secondary basis for the distribution of public service information from Travelers' Information Stations operating in accordance with the provisions of 47 C.F.R. § 90.242 on 10 kilohertz spaced channels from 540 kHz to 1700 kHz.

\* \* \* \* \*

US340 The band 2-30 MHz is available on a non-interference basis to U.S. Government and non-U.S. Government maritime and aeronautical stations for the purposes of measuring the quality of reception on radio channels. See 47 C.F.R. § 87.149 for the list of protected frequencies and bands within this frequency range. Actual communications shall be limited to those frequencies specifically allocated to the maritime mobile and aeronautical mobile services.

\* \* \* \* \*

US364 Consistent with US18, stations may be authorized on a primary basis in the band 285-325 kHz for the specific purpose of transmitting differential global positioning system information.

US366 On April 1, 2007, the bands 5900-5950 kHz, 7300-7350 kHz, 9400-9500 kHz, 11600-11650 kHz, 12050-12100 kHz, 13570-13600 kHz, 13800-13870 kHz, 15600-15800 kHz, 17480-17550 kHz, and 18900-19020 kHz shall be allocated exclusively to the broadcasting service. Beginning April 1, 2007, frequencies in these bands may be used by stations in the fixed and mobile services, communicating only within the United States and its insular areas, on the condition that harmful interference is not caused to the broadcasting service. When using frequencies for fixed and mobile services, licensees shall be limited to the minimum power needed to achieve communications and shall take account of the seasonal use of frequencies by the broadcasting service published in accordance with Article 12 of the ITU *Radio Regulations*.

US367 On the condition that harmful interference is not caused to the broadcasting service, frequencies in the bands 9775-9900 kHz, 11650-11700 kHz, and 11975-12050 kHz may be used by U.S. Government stations in the fixed service communicating within the United States and its insular areas that are authorized as of [effective date of the Report and Order published in the Federal Register]. Each such station shall be limited to a total radiated power of 24 dBW.

\* \* \* \* \*

### PART 73 -- RADIO BROADCAST SERVICES

3. The authority citation for Part 73 continues to read as follows:

AUTHORITY: 47 U.S.C. 154, 303, 334 and 336.

4. Section 73.701 is amended by revising paragraphs (a), (e), (g), (h), (i), (j), and (l) to read as follow

#### § 73.701 Definitions.

\* \* \* \* \*

(a) International broadcast stations. A broadcasting station employing frequencies allocated to the broadcasting service between 5900 and 26100 kHz, the transmissions of which are intended to be received directly by the general public in foreign countries. (A station may be authorized more than one transmitter.) There are both Federal and non-Federal Government international broadcast stations; only the latter are licensed by the Commission and are subject to the rules of this subpart.

\* \* \* \* \*

(e) Coordinated Universal Time (UTC). Time scale, based on the second (SI), as defined in Recommendation ITU-R TF.460-5. UTC is equivalent to mean solar time at the prime meridian (0° longitude), formerly expressed as GMT.

\* \* \* \* \*

(g) Day. Any twenty-four hour period beginning 0100 UTC and ending 0100 UTC.

(h) Schedule A. That portion of any year commencing at 0100 UTC on the last Sunday in March and ending at 0100 UTC on the last Sunday in October.

(i) Schedule B. That portion of any year commencing at 0100 UTC on the last Sunday in October and ending at 0100 UTC on the last Sunday in March.

(j) [Reserved]

\* \* \* \* \*

(l) Reference month. That month of a season which is used for determining predicted propagation characteristics for the season. The reference month for Schedule **A** is July and the reference month for Schedule **B** is December.

\* \* \* \* \*

5. Sections 73.702 is amended by revising paragraphs (f) and (f)(1), by revising the first two sentences in paragraph (f)(2); by adding new paragraph (f)(3); and by redesignating paragraph (f)(3) as (f)(4) to read as follows:

**§ 73.702 Assignment and use of frequencies.**

\* \* \* \* \*

(f) Assigned frequencies shall be within the following bands, which are allocated on an exclusive basis to the broadcasting service:

(1) 5950-6200 kHz, 9500-9900 kHz, 11650-12050 kHz, 13600-13800 kHz, 15100-15600 kHz, 17550-17900 kHz, 21450-21850 kHz, and 25670-26100 kHz.

(2) In addition, the band 7100-7300 kHz is allocated on an exclusive basis to the broadcasting service in International Telecommunication Union (ITU) Regions 1 and 3 as defined in 47 C.F.R. § 2.104(b). Assignments in the band 7100-7300 kHz shall be limited to international broadcast stations located in ITU Region 3 insular areas (as defined in 47 C.F.R. § 2.105(a), note 4) that transmit to zones and areas of reception in ITU Region 1 or 3. \* \* \*

(3) In addition, frequencies within the following bands are assignable to the broadcasting service on an exclusive basis after April 1, 2007:

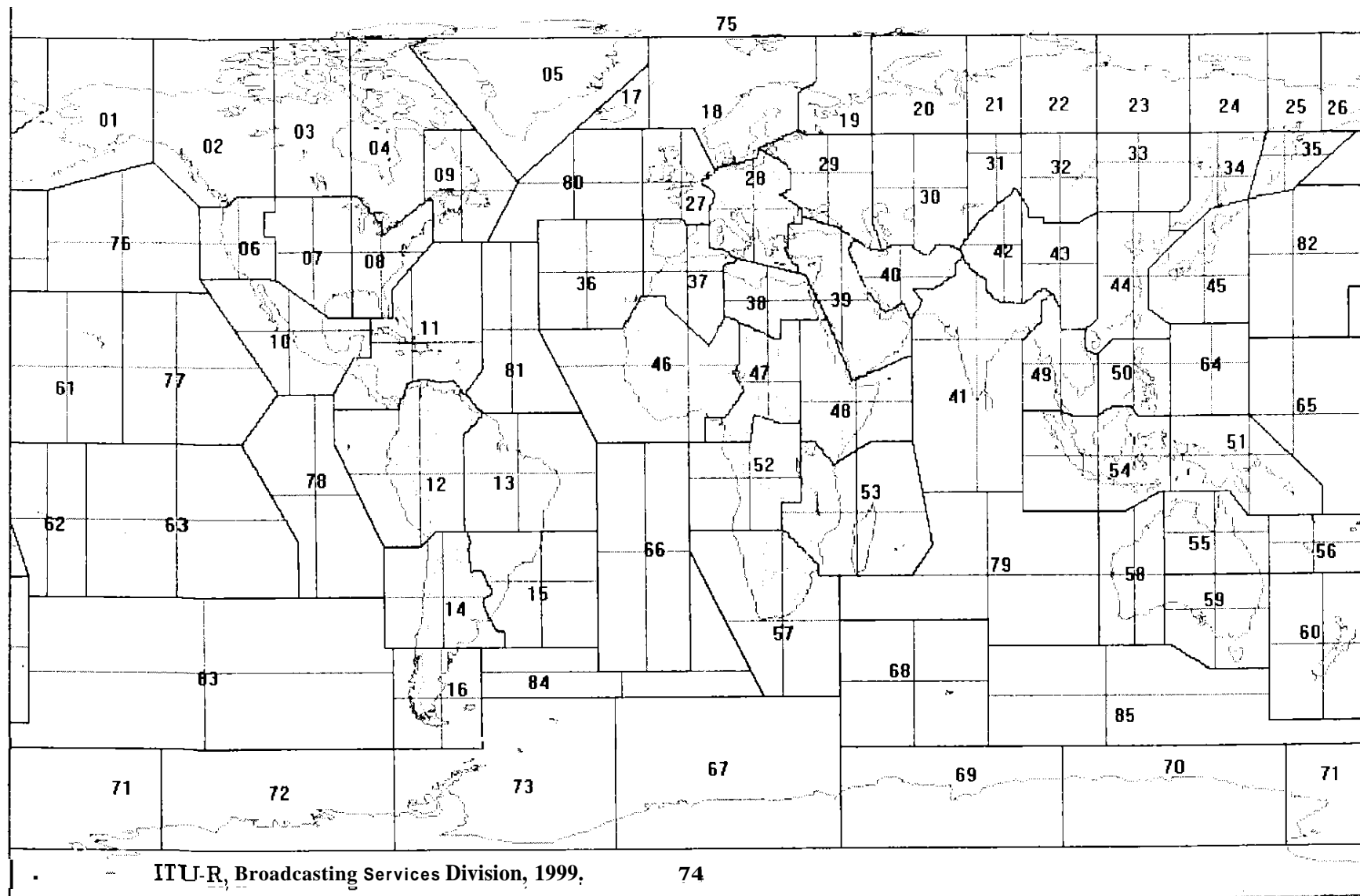
(i) 5900-5950 kHz, 7300-7350 kHz, 9400-9500 kHz, 11600-11650 kHz, 12050-12300 kHz, 13570-13600 kHz, 13800-13870 kHz, 15600-15800 kHz, 17480-17550 kHz, and 18900-19020 kHz (WARC-92 HFBC bands).

\* \* \* \* \*

6. Section 73.703 is amended by replacing the map:

**§ 73.703 Geographical zones and areas of reception.**

\* \* \* \* \*





7. Section 73.756(c) is revised to read as follows:

**§ 73.756 Transmission system requirements.**

\* \* \* \* \*

(c) Frequency tolerance. The transmitter shall maintain the operating frequency within 10 Hz of the assigned frequency.

8. Section 73.766 is amended by revising the last sentence to read as follows:

**§ 73.766 Modulation and bandwidth.**

\* \* \* The highest modulating frequency shall not exceed 4.5 kHz.

**PART 74--EXPERIMENTAL RADIO, AUXILIARY, SPECIAL BROADCASTING AND OTHER PROGRAM DISTRIBUTIONAL SERVICES**

9. The authority citation for Part 74 continues to read as follows:

AUTHORITY: 47 U.S.C. 154, 303, 307, and 554.

10. Section 74.402 is amended by removing “(except 1606, 1622, and 1646 kHz)” from the introductory text of (a) and removing and reserving paragraphs (a)(1) and (e)(1), to read as follows:

**§ 74.402 Frequency assignment.**

(a) The following channels may be assigned for use by broadcast remote pickup stations using any emission (other than single sideband or pulse) that will be in accordance with the provisions of § 74.462.

(1) [Reserved]

\* \* \* \* \*

(e) \* \* \* \* \*

(1) [Reserved]

11. Section 74.462 is amended by removing the entry containing the single text “kHz” in the Frequencies column and the entry for frequencies 1606, 1622, and 1646 from the table in (b).

12. Section 74.464 is amended by removing the entry for frequency range 1.6 to 2 MHz, the entry for 200 W or less, the entry for over 200 W, and footnote 1 from the table.

**PART 100--STATIONS IN THE MARITIME SERVICES**

13. The authority citation for Part 80 continues to read as follows:

AUTHORITY: Secs. 4, 303, 307(e), 309, and 332, 48 Stat. 1066, 1082, as amended; 47 U.S.C. 154, 303, 307(e), 309, and 332, unless otherwise noted. Interpret or apply 48 Stat. 1064-1068, 1081-1105, as amended; 47 U.S.C. 151-155, 301-609; 3 UST 3450, 3 UST 4726, 12 UST 2377.

14. Section 80.373 is amended by adding note 1 to the last two frequencies in the table in paragraph (d)(1) and by adding note 3 to the first six frequencies in the table in paragraph (i) to read as follows:

**§ 80.373 Private communications frequencies.**

\* \* \* \* \*

(d) Radioprinter frequencies. (1) The following table describes the bands available for radioprinter simplex communications between ship and private coast stations:

**FREQUENCY BANDS (kHz)**

2107-2170	4750-4850
2194-2495	5060-5450
2505-2850	5700-5950 <sup>1</sup>
3155-3400	7300-8100 <sup>1</sup>
4438-4650	

<sup>1</sup>After **April 1, 2007**, use of the sub-bands 5900-5950 kHz and 7300-7350 kHz shall be on the condition that harmful interference is not caused to HF broadcasting.

\* \* \* \* \*

(i) \* \* \*

**PRIVATE COMMUNICATIONS IN ALASKA CARRIER FREQUENCIES (kHz)**

1619.0 <sup>3</sup>	* * *	* * *
1622.0 <sup>3</sup>		
1643.0 <sup>3</sup>		
1646.0 <sup>3</sup>		
1649.0 <sup>3</sup>		
1652.0 <sup>3</sup>		
1705.0 <sup>3</sup>		

\* \* \* \* \*

<sup>3</sup>Use of these frequencies is on a secondary basis to Region 2 broadcasting.

\* \* \* \* \*

15. Section 80.387 is amended by revising **the** table in paragraph (b) by adding new footnote **4** to the first seven entries in the first column and by adding new footnote 5 to the last entry in the third column of the table of camer frequencies.

**§ 80.387 Frequencies for Alaska fixed stations.**

(b) Alaska private-fixed station frequencies:

1643.0 <sup>4</sup>	+	*
1646.0 <sup>4</sup>		
1649.0 <sup>4</sup>		
1652.0 <sup>4</sup>		
1657.0 <sup>4</sup>		
1660.0 <sup>4</sup>		
1705.0 <sup>4</sup>	*	*
+		
.....		<sup>2,5</sup> 11601.5

**PART 90 — PRIVATE LAND MOBILE RADIO SERVICES**

16. The authority citation for Part 90 continues to read as follows:

AUTHORITY: Sections 4(i), 11, 303(g), 303(r), and 332(c)(7) of the Communications Act of 1934, as amended, 47 U.S.C. 154(i), 161, 303(g), 303(r), 332(c)(7).

17. Section 90.20 is amended by revising the table in paragraph (C)(3) to remove the frequency 1630 kHz.

**§ 90.20 Public Safety Pool.**

\* \* \* \* \*

530.....	.....	1 .....	PX
1610.....	Base (T.I.S.).....	1 .....	PX
1722.....	Base or mobile.....	2, 3.....	PP

18. Section 90.35 is amended by (1) revising the kilohertz portion of the table in paragraph (b)(3) to remove the frequencies 1614 kHz, 1628 kHz, 1652 kHz, 1676 kHz, and 1700 kHz; (2) revising the megahertz portion of the table in paragraph (b)(3) to add limitation 9 to the frequencies 25.12 MHz, **25.14**

MHz, 25.16 MHz, 25.18 MHz, and 25.20 MHz; and to add the frequencies 27.555 MHz, 27.615 MHz, 27.635 MHz, 27.655 MHz, 27.765 MHz, and 27.86 MHz in numerical order; (3) removing paragraph (c)(2); and (4) adding paragraph (c)(82) to read as follows.

**§ 90.35 Industrial/Business Pool.**

\* \* \* \* \*

2000 to 25000.....	Fixed, base or mobile...	I	
2292.....	Base or mobile.....	4, 5, 7	
2398.....	do.....	5, 7	
4637.5.....	do.....	5, 7	
Megahertz			
* * *	* * *	* * *	*
25.12	do.....	9.....	IP
25.14	do.....	3, 4, 9.....	IP
25.16	do.....	9.....	IP
25.18	do.....	3, 4, 9.....	IP
25.20	do.....	9.....	IP
* * *	* * *	* * *	*
27.555	Base or mobile	82	
27.615	do.....	82	
27.635	do.....	82	
27.655	do.....	82	
27.765	do.....	82	
27.86	do.....	82	
29.71	do.....		
* * *	* * *	* * *	*

(c) \* \* \*

\* \* \* \* \*

(2) [Reserved]

\* \* \* \* \*

(82) The frequency may be assigned only to entities meeting the definition of a forest product licensee (see § 90.7). Operations are on a secondary basis to Federal Government operations including experimental stations, will not exceed 150 watts output power, and are limited to the states of Washington, Oregon, Maine, North Carolina, South Carolina, Tennessee, Georgia, Florida, Alabama, Mississippi, Louisiana, and Texas (eastern portion).

\* \* \* \* \*

19. Section 90.103 is amended by revising the table in paragraph (b), by revising paragraph (c)(4), and by removing paragraphs (28) and (29).

**§ 90.103 Radiolocation Service.**

(h) Frequencies available. \* \* \*

**RADIOLOCATION SERVICE FREQUENCY TABLE**

Frequency or Band	Class of station(s)	Limitation
Kilohertz		
70 to 90.....	Radiolocation land or mobile	1
90 to 110.....	Radiolocation land.....	2
110 to 130.....	Radiolocation land or mobile	1
1705 to 1715.....	...do.....	4, 5, 6
1715 to 1750.....	...do.....	5, 6
1750 to 1800.....	...do.....	5, 6, 7
*	*	*

(c) \* \* \* \* \*

(4) The non-Federal Government radiolocation service in this band is on a secondary basis to stations in the aeronautical radionavigation service operating on 1708 kHz.

\* \* \* \* \*

(28) [Reserved]

(29) [Reserved]

\* \* \* \* \*

20 Section 90.263 is amended by revising the third sentence to read as follows:

**§ 90.263 Substitution of frequencies below 25 MHz.**

\* \* \* In such cases, a substitute frequency, if found to be available, may be assigned from the following bands: 1705-1750 kHz, 2107-2170 kHz, 2194-2495 kHz, 2506-2850 kHz, 3155-3400 kHz, or 4438-4650 kHz. \* \* \*

\* \* \* \* \*

**PART 97--AMATEUR RADIO SERVICE**

21. The authority citation for Part 97 continues to read as follows:

*AUTHORITY:* 48 Stat. 1066, 1082, as amended; 47 U.S.C. 154, 303. Interpret or apply 48 Stat. 1064-1068, 1081-1105, as amended; 47 U.S.C. 151-155, 301-609, unless otherwise noted.

22. Section 97.401 is amended by removing paragraph (b) and by redesignating paragraphs (c) and (d) as (h) and (c), respectively.

**§ 97.101 Operation during a disaster.**

\* \* \* \* \*